

PATENT

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First Class Mail in		the United States Postal Service on the date set forth below as Patents, P. O. Box 1450, Alexandria, VA 22313-1450. Michael A. Jaskolski, Reg. No. 37,551
IN	ΓHE UNITED STATES PATE	NT AND TRADEMARK OFFICE
Applicants:	David W. Farchmin	Client Docket No. 03AB048
Serial No.:	10/774,276	
Filing Date:	February 6, 2004	
Title:	Location Based Diagnostics Metho	d and Apparatus
Art Unit:		
Examiner:		
Atty Docket:	110003.00025	
Commission P. O. Box 14	er for Patents	MENT PURSUANT TO 37 CFR 1.97
Commission P. O. Box 14	er for Patents	TENT FURSUANT TO 57 CFR 1.97
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Commission P. O. Box 14 Alexandria, V Sir: The fo	er for Patents 50 7A 22313-1450 Allowing are submitted in the about and 1.98: of documents on form PTO-144	
Commission P. O. Box 14 Alexandria, V Sir: The form 37 CFR 1.97 A list of document A tran	er for Patents 50 7A 22313-1450 Allowing are submitted in the about and 1.98: of documents on form PTO-144	ove-identified application in compliance with growth growth growth growth growth copies of each identified
Commission P. O. Box 14 Alexandria, V Sir: The form 37 CFR 1.97 A list of document of the do	er for Patents 50 /A 22313-1450 following are submitted in the about and 1.98: of documents on form PTO-144 tent; slation or a concise explanation	ove-identified application in compliance with growth growth growth growth growth copies of each identified
Commission P. O. Box 14 Alexandria, V Sir: The form 37 CFR 1.97 A list of document of the do	er for Patents 50 /A 22313-1450 Allowing are submitted in the about and 1.98: of documents on form PTO-144 tent; slation or a concise explanation tent is enclosed herewith. submitted in accordance with:	ove-identified application in compliance with growth growth growth growth growth copies of each identified

or

☐ The required certification made under the heading "Certification" below;

		The \$ fee specified in 37 CFR §1.17(p) for submission of this Information Disclosure Statement is authorized under the heading "Authorization to Charge Fees" below.
	37 CF	R §1.97(d) [before issue fee payment]; and
	under PETIT	This is a petition for consideration of the subject Information Disclosure nent. The petition fee \$ required by 37 CFR 1.17(i)(1) is authorized the heading "Authorization to Charge Fees." (Direct this letter to "Attention TIONS EXAMINER" and if applicable include batch locator information: e.g. wed Files, Batch, Date of Allowance"),
	b)	The required Certification is stated under the heading "Certification" below.
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		Each item of information contained in this Statement was first cited in any communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of this Statement; or
		No item of information contained in this statement was cited in a communication from a foreign patent office in a counterpart foreign application and, to the knowledge of the person signing this document after making reasonable inquiry, was known to any individual designated in 37 CFR 1.56(c) more than three (3) months prior to the filing of this Statement.
V	Autho	rization to Charge Fees
		charge all applicable fees associated with the submittal of this Information osure Statement to Deposit Account 17-0055.

Michael A. Jaskolski Attorney for Applicant Reg No.: 37,551 Quarles & Brady LLP 411 East Wisconsin Avenue Milwaukee, WI 53202

Respectfully submitted, DAVID W. FARCHMIN

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INFORMATION DISCLOSURE STATEMENT BY APPLICANT

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Sheet	1	of	4	ļ
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Complete if Known				
Application Number	10/774,276			
Filing Date	02-06-2004			
First Named Inventor	David W. Farchmin			
Group Art Unit				
Examiner Name				
Attorney Docket Number	110003.00025.03AB 048			

	Cite -	J.S. Patent Docu	mont		U.S. PATENT DOCUMENTS						
	No.1 N	umher .	d Code ² known)	Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear					
1	5,8	35,061		Stewart	11-10-98	-					
2	6,0	60,993		Cohen	05-09-00						
3	5,9	60,085		de la Huerga	09-28-99						
4	4,6	12,620		Davis, et al.	09-16-86						
5		236,335		Goodwin III	05-22-01						
6	6,0	11,487		Plocher	01-04-00						
7	20	01/0024174	1	Turner	09-27-01						
8		751,221		Stanfield, et al.	05-12-98						
9	5,6	27,549		Park	05-06-97						
10	0 5,6	49,300		Snyder et al	07-15-97 ⁻						
1	1 6,3	362,783		Sugiura et al	03-26-02						
		87,266		Malec et al	02-15-94						
1	3 6,3	359,711		Cole et al	03-19-02						
1.	4 6,2	11,799		Post et al	Apr. 3, 2001						
1	5 6,2	282,455		Engdahl	Aug. 28, 2001						
1	6.4	46,004		Cao et al	Sep. 3, 2002						
1	7 20	020125886		Bates et al	Sep. 12, 2002						
1	8 5,5	544,321		Theimer et al	Aug. 6, 1996						
19	9 20	03/0011467	7	Suomela	Jan. 16, 2003						

				FOR	EIGN PATENT DOCUMENT	S		
Examiner Initials*	Cite No.1	Office:	Foreign Patent Doc Number4	ument Kind Code ⁵ (<i>if known</i>)		Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T ⁶
	1		0 992 921 A2		Lucent Technologies Inc	12.04.2000	* *-	
	2		WO 00/50919		Micosoft Corporation	31.08.2000		
	3		WO 02/054813	A1	EKA-Hau Oy	11.07.2002		\Box
	4		WO 02/43428 A	.1	Tele-Com Italia Lab s.p.	30.05.2002		
	5		WO 01/16607 A	.2	Cordless Antistatic Rese	08.03.2001		
	6		WO 02/12992 A	.2	IBM United Kingdom Lir	14.02.2002		
	7		GB 2 365 662		International Business N	20.02.2002		
	8		WO 02/056274	A1	Digital Angel Corporatio	18.07.2002		
	9		WO 00/17737		Kemink et al	30.03.00		
	10		WO 01/82032 A	12	Baker, Richard A.	01.11.2001		

Examiner	· · · · · · · · · · · · · · · · · · ·	Date	
Signature		Considered	

¹ Unique citation designation number. ² See attached Kinds of U.S. Patent Documents. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). 4 For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. 5 Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.



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INFORMATION DISCLOSURE STATEMENT BY APPLICANT

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Complete if Known					
Application Number	10/774,276				
Filing Date	02-06-2004				
First Named Inventor	David W. Farchmin				
Art Unit					
Examiner Name					
Attorney Docket Number	110003 00025 03AB048				

			U. S. PATENT	DOCUMENTS	
Examiner Initials*	Cite No. ¹	Document Number Number-Kind Code ^{2 (f known)}	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
	20	^{US-} 6.167.464	12-26-00	Kretschmann	
	21	^{US-} 5,907,491	05-25-99	Canada et al	
	22	^{US-} 2002/0030094 A1	03-14-02	Curry et al	
	23	^{US-} 2002/0167417 A1	11-14-02	Wells, II et al	
	24	^{US-} 2002/0058499 A1	05-16-02	Ortiz	
	25	^{US-} 5.202.929	04-13-93	Lemelson	
	26	^{US-} 5,548,660	08-20-96	Lemelson	
	27	^{US-} 2001/0018349	08-30-01	Kinnunen et al	
	28	^{US-} 5.485.634	01-16-96	Weiser et al	
	29	^{US-} 5.910.799	06-08-99	Carpenter et al	
	30	^{US-} 5,552,806	09-03-96	Lenchik	
	31	^{US-} 2002/0161633 A1	10-31-02	Jacob et al	
	32	^{US-} 5,555,376	09-10-96	Theimer et al	
	33	^{US-} 5,642,303	06-24-97	Small et al	
	34	^{US-} 2002/0007407 A1	01-17-02	Klein	
	35	^{US-} 6.496.775 B2	12-17-02	McDonald Jr et al	
	36	^{US-} 6.611.755 B1	08-26-03	Coffee et al	
	37	^{US-} 4.598.275	07-01-86	Ross et al	
	38	^{US-} 2002/0123325 A1	09-05-02	Cooper	

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Examiner Cite Initials* No.1		Foreign Patent Document	Publication Date	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages	1
miliais	140.	Country Code ³ -Number ⁴ -Kind Code ⁵ (<i>if known</i>)	MM-DD-YYYY	Applicant of Oned Document	Or Relevant Figures Appear	Τ°
	11	WO 02/05107 A1	17.01.2002	Swales, Andrew		
	12	EP 0 801 342 B1	08.01.2003	Carpenter, et al		
	13	EP 0 626 635 A2	30.11.94	Palrang et al		
	14	WO 02/13557 A1	14.02.2002	Keller, et al		
	15	WO 01/41546 A2	14.06.2001	Brumitt et al		Γ
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Translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450.. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number. Complete if Known Substitute for form 1449A/PTO 10/774,276 **Application Number** INFORMATION DISCLOSURE February 6, 2004 **Filing Date** STATEMENT BY APPLICANT **First Named Inventor** David W. Farchmin

Group Art Unit (use as many sheets as necessary) **Examiner Name** Sheet of Attorney Docket Number 110003.00025.03AB048

			U.S. PATENT DOCU	JMENTS	
Examiner Initials*	Cite No.1	U.S. Patent Document Kind Code Number (if known)	Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
	39	4,728,959	Maloney et al	Mar. 1, 1988	
	40	5,119,104	Heller	Jun. 2, 1992	
	41	6,026,304	Hilsenrath et al	Feb. 15, 2000	
	42	20010003443	Velazguez et al	Jun. 14, 2001	
	43	6,252,867	Pfeil et al	Jun. 26, 2001	
	44	20010021182	Wakutsu	Sep. 13, 2001	
	45	6,347,229	Zelmanovich et al	Feb. 12, 2002	
	46	20020051430	Kasami et al	May 2, 2002	
	47	6,407,719	Ohira et al	Jun. 18, 2002	
	48	5,991,284	Willenegger et al	Nov. 23, 1999	
	49	20020102995	Zelmanovich et al	Aug. 1, 2002	
	50	20020118655	Harrington et al	Aug. 29, 2002	
	51	6,437,740	De Champlain et al	Aug. 20, 2002	
	52	5,642,353	Roy, III et al	Jun. 24, 1997	
	53	4,700,197	Milne	Oct. 13, 1987	
	54	6,381,502	Rudder et al	04-30-02	
				 	

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Examiner Initials*	Cite No.1	Foreign Patent Docum Office ³ Number ⁴		ment Kind Code ⁵ (if known)	Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T ⁶
	16		WO 01/22118 A	2	James G. Seal	29.Mar.2001		
	17		WO 99/39219		Belcher, et al	5.Aug.1999		
	18		WO 01/82032 A	2	Baker, Richard A.	01.11.2001	-	
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Examiner	Date
Signature	Considered

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Substitu	Substitute for form 1449B/PTO			Complete if Known			
				Application Number	10/774,276		
INF	ORMATIOI	ND	ISCLOSURE	Filing Date	02-06-2004		
STATEMENT BY APPLICANT			ΔΡΡΙ ΙζΔΝΤ	First Named Inventor	David W. Farchmin		
017			Al I Elo/all	Group Art Unit			
	(use as many s	sheet	's as necessary)	Examiner Name			
Sheet	4	of	4	Attorney Docket Number	110003.00025.03AB 048		

OTHER PRIOR ART NON PATENT LITERATURE DOCUMENTS						
Examiner Initials*	Cite No.1	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T2			
	1	A Statistical Modeling Approach to Location Estimation; IEEE Transactions on Mobile Computing; Vol. 1, No. 1, Jan-Mar 2002; pg. 59-69; Roos, et al				
	2	A Probabilistic Approach to WLAN User Location Estimation; International Journal of Wireless Information Networks, Vol. 9, No. 3, pg. 155-164; Roos, et al.				
	3	A Statistical Modeling Approach To Location Estimation; Master's Thesis, Univ. of Helsinki, Department of Computer Science, May 5, 2001, Teemu Tonteri				
	4	An Indoors Wireless Positioning System Based On Wireless Local Area Network Infrastructure (13 pgs), SatNav 2003, Melbourne, Australia 7/22-25/03, Wang et al				
			_			

Examiner	***	Date	
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